

1. D.D.3 2. H.C.G.

3. D.D. (N.S.)

4. D.D. (M.W.)

5. D.D. (A.S.)

6. C.C.R.

7. Cdr. Tandy

8. Major Morgan

21-22. Op-20-G (2) (via Lt. Cdr. Manson)

23. G-2 (via Lt. Col. Hilles)

24-27. A.S.A. (4) (via Major Seaman) 28. Director, S.I.D. USFET

29. Col. Kunkel, USSTAF.

## TICOM

9. Chairman

10-12. S.A.C. (3)

13. Cdr. Bacon

14 Major Seaman

15. Lt. Cdr. Manson

16. Major Cowan

17-20. Ticom Files (4)

## Additional

30. S.A.C. for Section V. 31-33. Mr. Pritchard (3)

Report of Interrogation
of
KURT SAUERBIER
of RLM/FORSCHUNGSAME, Referat 90, Haupt
Abteilung IV at DUSTBIN, SCHLOSS KRAUSBERG,
GERMANY - 27th August, 1945.

For further references on this organization see TICOM I/25 and TICOM I/54.

Interrogator: Major William P. Bundy.

- 1. Subject. SAUERBIER is 41 years old, neat and anxious to impress. He joined the Forschungsant in its infancy in 1935 on the strength of a knowledge of Swedish and some English. He has no special mathematical training or qualifications and was an ordinary bank clerk in a Hamburg bank, who was out of a job and heard that the FA was looking for men who knew languages. His poor manner of expression and the lack of conciseness and detail of his answers combined to give a total impression of distinctly mediocre ability and of an attitude typical of the entrenched civil servant, proud of his own little pew but seeing very little beyond it.
- 2. Career. There were only about a dozen cryptanalytic personnel in the FA in 1935. Subject took a short course in the fundamentals and then went to work on commercial code traffic. The head of the cryptanalytic section (later HAUPTABTEILUNG IV) was then, and remained, Min. Rat Dr. SCHROEDER.

In peacetime subject was concerned almost entirely with connercial codes in the German language. This involved the traffic of German firms to foreign countries during the 4-Year Plan. Another major undertaking was the code used by the Czech SKODA firm to IRAN and IRAQ in 1935. This was concerned with bridge-t building projects almost entirely. Almost all of the work was with known commercial codes.

With the outbreak of war the office was reorganised, and S. was made head of Referat 9C, Referat "NORDLAENDER UND INLAND". The head of Referat 9 was Ober Reg Rat WENZEL.

- 3. Referat 90 This Referat appears to have been a catch-all for assorted problems that did not fit into any other section. Its commitments were:
  - a) SWEDEN, DENMARK, NORWAY diplomatic and consular traffic.
  - b) The secret messages of detained persons as requested by the police or other authority. ("KASSIBER").
  - c) The commercial traffic of neutral countries (especially TURKEY).
  - d) Ship traffic of Northern European countries (1939-40 only).

The strength of the Referat varied according to its success with problems. It averaged about 20 people, mainly routine helpers.

4. Swedish consular traffic in a 4 and 5 digit non-alphabetic code, unenciphered, was read, especially the link between STOCKHOLM and TOKYO. Almost all of the other links went over to a machine in 1939, but TOKYO was unable to convert. The machine was Swedishmade and was called to "KRYTAA". S. thinks it had 15 numbered wheels. The FA never broke this and considered it 100% secure. (This sounded to interrogator like a thoroughly garbled description of either the KRYHA or HAGELIN machine. S. did not seem sensitive on the point, or to be garbling deliberately).

None of the main consular links to W.SHINGTON, LONDON, or PARIS were ever read, nor was there any success with Swedish diplomatic in Referat 9C.

- 5. Norwegian Diplomatic. An unenciphered 5-letter code was read completely up to 1940. Nothing was read after the Norwegian Government moved to LONDON, and S., had a vague impression they had gone over to a machine.
- 6. Danish Diplomatic. About 50% of the traffic in the old diplomatic code was read up to 1940. Nothing was solved thereafter except an occasional message in the old code, on some minor commercial subject.
- 7. Commercial Codes. Several enciphered versions of standard codes were solved, but S. did not consider any of the results of importance. Traffic between TURKEY and SWEDEN was attacked particularly and solved, but yielded none of the expected information on shipping possibilities.
- A major effort of the section was the solution in 1944 of the code used by INTABANK, the International Bank at BASLE. The code used was an old Bank of England code which had been solved in 1941. The pages were shuffled, and an encipherment added, but solution was achieved by the use of cribs and common form messages, of which the best was a statement of the daily exchange rates between various countries.

The detail of the encipherment was as follows: the basic system was bigram substitution from a table different for each link and changing each 3 months. The text was divided into segments of three or four groups, and the plain text bigrams for encipherment were prearranged pairs, as 1 and 15, 2 and 14, 6 and 10 etc. Very long depths and near depths were produced on closely similar number values, and this was the entry. The whole solution took about 6 months, starting with 1942-3 traffic and working up to 1944. The interception of the traffic was not systematised at any time, and S. did not believe more than 50% of all the traffic was read as a result of the solution.

- 8. Clandestine Traffic of Detainees. This was only scattered messages in individualistic systems, which were rarely solved. SAUERBIER's concern with it led indirectly to his work on:
- 9. Russian Agent Traffic. SAUERDIER was approached directly in 1941 by the ORDNUNGSFOLIZEI with a request for cryptographic advice on the systems used by Russian agents. They gave him copies of

systems that were captured with agents, and he grouped these by categories. Analysis was limited almost entirely to a study of characteristics and recognition signals, with a view to advising on the possibility of a "GECFNSPIEL".

This work was done first in S's own time. WENZEL, his chief, opposed his involvement in it, but was powerless to prevent it, as the requests later came down through proper channels directed to S. It was a one-man job entirely, with only the occasional help of a girl file clerk. It generally took about one helf of S's time.

- S. estimated that a total of 1500 different keys passed through his hands, mostly hand substitution systems, mostly in Russian but many in German (S. himself does not know Russian at all.) of these only 4 or 5 were solved without a completely captured key. One of the achievements of which SAUERBIER was proudest was the use of an ordinary book, left behind by an agent, to solve his traffic.
- S. was never concerned with radio procedures, but purely with the cipher systems used. He was able to give advice on the probable group to which an agent belonged and could then consult his records for an account of the success or failure of a particular technique of "GENENSPIEL" against this group.
- 10. Rest of Hauptabteilung IV. S's account of the whold crypt section is less complete than that of PAETZEL (I/54) but agrees with it on all important particulars except for the size of Referat 9. S. gives this as 45 people during the war, with a few more previously who were engaged in a fruitless attack on Russian diplomatic traffic. (This attack culminated in the belief that the system was a code with a non-repeating additive).
- S. could give no details of Referats 6, 7, or 8. Of Referat 9A he recalled only the solution of a Polish diplomatic code in 1940-41. This he remembered as using one additive of specific length, which after 1943 became too long to produce depths, so that it was not solved after that time. (This sounded to interrogator more like a Polish Home Office than a Foreign Office system).
- S. give a general picture of a highly bureaucratic organisation dominated by red tape and procedure, so that no department knew what the others were doing. SCHROEDER was old and fussy, liking quiet and disliking innovation. PAETZEL was also very petty and academic in his outlook.

This narrowness affected relations of the FA with the Auswaertiges Amt, OKW, and OKH. Liaison was handled by a single representative and never involved any exchange of visits by operations personnel. S. said he did not know one single person in any of the other organizations.

Similarly there was no close relation between solution and evaluation work. The crypt sections simply did their work and handed the untranslated product over to the evaluation section without ever knowing what became it thereafter -

11. Movements of FA. Hauptabt. IV moved to BRESLAU early in 1944. Working conditions were not good and the work suffered. With the Russian advance BRESLAU was abandoned early in 1945 and to BERLIN.